Report Date: 30 Jun 2014

Summary Report for Individual Task
551-88L-3056
Troubleshoot Auxiliary Deck Equipment
Status: Approved

Condition: Given auxiliary deck equipment aboard a vessel, at sea, at anchor or moored alongside a pier, day or night, under all sea and weather conditions, while wearing appropriate PPE, (i.e. hearing protection, Nitrile gloves, eye protection, etc.), lock out tag out kit and a marine rail tool box.

Standard: The Soldier correctly troubleshoots auxiliary deck equipment aboard an Army vessel, IAW the appropriate Technical Manual and local SOPs, without injury to self or others and without damage to equipment.

Special Condition: None

Safety Risk: High

MOPP 4:

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

Remarks: None

Notes: None

Performance Steps

1. Demonstrate basic knowledge for troubleshooting procedures of the central hydraulic power unit.

a. Hydraulic power unit fails to start.

(1) Actions to take

(a) Check for power.

(b) Check the dial pressure gage for proper indication (green).

(c) Check controller pilot circuit fuses (control circuits).

(d) Check for defective start switch.

(e) Check for defective alternating current motor.

(2) Action performed

(a) Reestablish power.

(b) If in the (red), the filter element should be changed.

(c) Replace fuses if necessary.

(d) Replace start switch.

(e) Replace alternating current motor

b. Hydraulic power unit fails to pump fluid.

(1) Actions to take

(a) Check fluid level.

(b) Check for stuck directional control valve.

(c) Check for contaminated fluid.

(d) Check for clogged suction strainer.

(e) Check for defective relief valve.

(f) Check for defective hydraulic pump.

(2) Action performed

(a) Fill to correct fluid level

(b) Replace directional control valve

(c) Change fluid

(d) Remove and clean suction strainer

(e) Replace relief valve

(f) Replace hydraulic pump

2. Demonstrate basic knowledge for troubleshooting procedures of the windlass.

a. Windlass overruns load or hydraulic fail-safe brake fails.

(1) Check for defective directional control valve.

(2) Replace hydraulic valve.

b. No shaft-rotation in haul-back or payout.

(1) Actions to take

(a) Check for electrical power at the hydraulic power pack.

(b) Check for defective hydraulic motor. Hydraulic pressure is applied and automatic brake is releasing.

(c) Check for defective automatic brake. Hydraulic pressure is applied but no audible indication the automatic brake is releasing.

(d) Check for defective directional control valve. Hydraulic pressure is present at the valve input with no indication of automatic brake release.

(2) Action performed

(a) Repair power distribution system

(b) Repair hydraulic motor

(c) Repair automatic brake

(d) Repair directional control valve

c. No wildcat rotation with clutch engaged and haul-back/payout switch activated.

(1) Check for defective clutch. Visually observe clutch mechanism. Clutch lugs should be firmly meshed with lugs on the wildcat

(2) Replace clutch

d. Clutch fails to lock in or out.

(1) Check for defective clutch locking mechanism. Visually inspect where the lock fits over the bearing housing. Locking arm should stay firmly in place.

(2) Replace clutch.

e. Chain jumps the wildcat.

(1) Check for defective wildcat chain sprockets.

(2) Replace wildcat.

f. Gearbox vibrations/noise.

(1) Actions to take

(a) Check gearbox oil level.

(b) Check gearbox mounting bolts.

(2) Action performed

(a) Refill as necessary.

(b) Tighten bolts.

g. Windlass fails to hold load in neutral.

(1) Check for automatic brake slipping.

(2) Repair automatic brake

h. Slow Rotation.

(1) Actions to take

(a) Check oil level at power pack reservoir.

(b) Check hydraulic pressure at power pack pressure gauge.

(2) Action performed

(a) Refill as necessary.

(b) Repair pump.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: None

Evaluation Preparation: None

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Demonstrated basic knowledge for troubleshooting procedures of the central hydraulic power unit.			
a. Hydraulic power unit fails to start.			
b. Hydraulic power unit fails to pump fluid.			
2. Demonstrated basic knowledge for troubleshooting procedures of the windlass.			
a. Windlass overruns load or hydraulic fail-safe brake fails.			
b. No shaft-rotation in haul-back or payout.			
c. No wildcat rotation with clutch engaged and haul-back/payout switch activated.			
d. Clutch fails to lock in or out.			
e. Chain jumps the wildcat.			
f. Gearbox vibrations/noise.			
g. Windlass fails to hold load in neutral.			
h. Slow Rotation.			

Supporting Reference(s): None

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
551-88L-3052	Trouble Shoot a Hydraulic System	551 - Transportation (Individual)	Approved

Supported Individual Tasks : None

Supported Collective Tasks : None

ICTL Data :

ICTL Title	Personnel Type	MOS Data
88L40 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL4, Duty Pos: TGB, LIC: EN, SQI: O
88L30 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL3, Duty Pos: TFR, LIC: EN